Linking Montana's Heritage with its Digital Future

ITMC 2015 Project Excellence Awards

Project Title: State of Montana File Transfer Service 2.0

Agency: Department of Administration (State Information Technology Services Division)

Nominated by: Denise Adamson

Team Leader/ Members: Audrey Hinman, Denise Adamson, Evan Roberts, Kurt Fehlig, John Schuldt, Shannon Sitser, Suzanne Jackson, Erik Evans

Summary Paragraph: The File Transfer Service is an enterprise service used to transfer files securely in and out of the state network. SITSD recently did a major rewrite of the application to improve both performance and security. New features include MT Drive, enhanced user validation, drag and drop for file uploads, and an improved Application Programming Interface.

Project Description:

File Transfer Service (FTS) is an enterprise wide service which is used to securely transfer files in and out of the state network. Although it has been around since January of 2007, it was completely rewritten and re-launched in July of 2015. It has been used to securely transfer 645,000+ files in and out of the state network. Since the rewrite, 68,000 new files have been uploaded. The web application has over 46,000 users and is growing every day. The Agile Development Methodology was used which helped to ensure that the project was delivered on time, within budget, and incorporated 90% of the features requested by the user base.

The rewrite was completely designed around performance and security requirements as the highest priority. One of the security features implemented was an improved virus scan process. The files are also encrypted both in transit and at rest. File Transfer Service 2.0 also uses ePass Montana 2.0 which allowed the developers to add a new security features. The biggest benefit is the ability to authenticate users through an email validation workflow. Newer technologies were used to improve the speed of file uploads and downloads.

Along with security, the user experience was improved. Feedback from our users determined which features would be added. This included the ability to address a file to an active directory group instead

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of just an individual. Also included is the ability to turn email notifications on and off. The entire web application was implemented using the new features provided in Html 5. This allowed for 'drag and drop' of files for easy uploads. The application is now completely responsive and works seamlessly on desktop or mobile devices.

The standards based REST Application Programmer Interface (API) was also completely rewritten so that developers can easily write automated uploads and downloads of files in any language or programming environment. The API is used to support many agency business processes to automatically move files into and out of the state network. Over 186,000 files have been moved through the API.

The rewrite also included one of the most requested features - MT Drive. Each state employee with and active directory account gets 20GB of permanent storage in MT Drive. All the files stored in MT Drive are private unless the user decides to easily share them with either a state employee or a private citizen. This allows for easy collaboration and sharing of files, while ensuring they are kept secure. Over 3000 users are using this new feature.